

**IN MEMORIAM:
WILLARD HOLMES NUTTING, JR. (1916-1990)**

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Willard (Bill) H. Nutting, Jr., a Senior Mechanical Engineer and an avocational coleopterist, died on 19 Apr 1990, in his 73rd year, at Providence Hospital in Oakland, California, after several years of declining health culminating in leukemia.

Bill Nutting was born on 28 Jul 1916, in Berkeley, California, the eldest of two children of Willard Holmes Nutting, Sr., and May Louise Frederickson. His father, a chemist by profession, was born in the northern California community of Etna, in the Salmon Mountains of Siskiyou County, and moved to Piedmont, California, with his family in 1927. His grandfather, Charles Wilbur Nutting, a medical doctor who also served as head of the Grand Lodge of Masons of California, had settled in Etna, moving from Georgia in 1878. The Nutting family can trace its origins in America back twelve generations to John Nutting, who settled in Middlesex County, Massachusetts, from England, prior to his marriage on 28 Aug 1650.

Bill Nutting attended public schools in Oakland and graduated from Piedmont High School in 1934. It was during his high school days that he and Edward S. Ross became friends, and they were introduced by Kenny Masero (who later went into mining engineering) to the nurseryman and coleopterist Frederick William Nunenmacher (1870-1946). Nunenmacher's nursery was in the heart of Piedmont, at 11 Arbor Drive, and his house and a separate building with his beetle collection were situated in front of the nursery. Nunenmacher's collection was stored in black "Raisin and Thiebaut" boxes, which lined the inside walls of the building. The young collectors Nutting and Ross would visit Nunenmacher each Saturday to discuss their new collections. They were received with enthusiasm and were aided with their identifications or given specimens, and they adopted the high standards of Nunenmacher in preparing and labeling their collections. They were encouraged to make labels for each of the Coleoptera families, whether they had specimens of them or not, so that they could learn the names of families not yet collected. Nutting received most help with the Coccinellidae, which was a speciality of Nunenmacher, while Ross began to specialize in the Histeridae.

The young entomologists were also aided by Edwin R. Leach (1878-1971), a mining engineer and avocational coleopterist and naturalist, of Piedmont, in their introduction to the Coleoptera. Nunenmacher assisted Leach with his gardening, and their homes were separated by only a few blocks. Nutting was to develop a lifetime interest in the Coleoptera, particularly the Coccinellidae, from these early contacts.

Bill Nutting received a Bachelor of Science degree in Mechanical Engineering from the University of California, Berkeley, in 1938. He then taught at the University of Santa Clara, and during the Second World War, he was employed by General Electric in defense-related projects. After the war he joined the staff of



Figure 1. Willard Holmes Nutting, Jr. (1916–1990).

Pacific Gas and Electric Company in San Francisco, from which he retired 34 years later in 1980 (Anonymous 1980).

In January 1953, Bill Nutting coauthored with R. A. Bowman of Bechtel Corporation the article "Atomic power plants are nearer reality." In 1954, he and his family moved to Chicago so that he could work on the Enrico Fermi Breeder Reactor. Returning to California in 1957, he played an important role in nuclear development with the Pacific Gas and Electric Company for the remainder of his career. He participated in project engineering and licensing of the first commercial nuclear power plant in this country, AEC No. 1, Vallecitos Nuclear Center, in southern Alameda County, California, as well as the electric generating plant by Humboldt Bay, near Eureka. He was elected in 1965 as a Director of the American

Nuclear Society for a three-year term (Anonymous 1965), and served as Chairman of the Nuclear Engineering Division of the American Society of Mechanical Engineers in 1971–1972.

Bill Nutting continued his avocational interest in the Coccinellidae throughout his life. Although such a comparison is not parallel, it was a great contrast to have such an imposing person, who was a good six feet six inches in height, finding his specialization in some of the smallest members of this family, the Scymnini, some but a millimeter and a quarter in length that require the most exacting care in their collection and curation. He enjoyed the meticulous preparation of these minute Coccinellidae. As acknowledged by Robert D. Gordon in his monograph of the Scymnini (Gordon 1976:4), "To W. H. Nutting (WHN), I owe a special debt of gratitude for his generosity in loaning me his specimens of Scymnini, in view of the interest he has maintained in the group for many years," and in turn Gordon named *Scymnus (Pullus) nuttingi* Gordon in his honor. Bill Nutting, with the encouragement of Kenneth S. Hagen of the Division of Biological Control, University of California, Albany, described four new species of California *Hyperaspis* (*H. longicoxitis* Nutting, *H. elali* Nutting, *H. querquesi* Nutting, and *H. mckenziei* Nutting) in 1980.

The Nutting collection of Coleoptera has been donated by his family to the California Academy of Sciences. It was arranged in 82 Cornell glass-topped drawers with specimens pinned in polyethylene foam trays, with some additional specimens stored in Schmitt boxes. Forty-one drawers are devoted to the Coccinellidae, and the remaining drawers to each of the following families: 16 to Scarabaeidae, 7 to Buprestidae, 5 to Tenebrionidae, 3 to Cerambycidae, 2 to Carabidae: Cicindelinae, 2 to Lucanidae, 1 to Meloidae, 1 to Histeridae, 1 to miscellaneous Coleoptera, and 3 empty drawers. The collection, which contains approximately 20,000 specimens, will have a Willard H. Nutting, Jr./California Academy of Sciences collection label applied to each pinned specimen prior to its incorporation into the Academy's Coleoptera collection. The collection contains paratypes of dozens of species, but it was Bill Nutting's policy not to retain holotypes in his collection; he deposited them previously at the California Academy of Sciences. His entomological library and correspondence have also accompanied the collection.

Between 1969 and 1978 Bill Nutting corresponded with the great Brazilian naturalist/collector Fritz Plaumann, of Nova Teutonia, Santa Catarina, Brazil, and received important collections of Coccinellidae and of other families, such as Buprestidae, from him.

Coleoptera material donated by Bill Nutting to the Academy in earlier years included the John E. Blum collection (of 150 Arbor Drive, Piedmont), which consisted of 6305 specimens of Coleoptera (3450 identified and 2855 unidentified) and contained the W. F. Leng collection of Mordellidae and Bruchidae. (According to Blum's correspondence with Leng, the four boxes of Mordellidae were purchased on 4 Apr 1939 for just \$20!). In June 1974, Nutting donated 15 types of *Diomus* (holotype and 12 paratypes of *D. arizonicus* Gordon, 1 paratype of *D. humilis* Gordon, and holotype of *D. pseudotaedatus* Gordon), and 150 types of *Scymnus* (holotype and 20 paratypes of *S. apithanus* Gordon, 8 paratypes of *S. aridoides* Gordon, 5 paratypes of *S. barberi* Gordon, 18 paratypes of *S. erythronotum* Gordon, holotype and 2 paratypes of *S. hesperius* Gordon, holotype and 3

paratypes of *S. huachuca* Gordon, 1 paratype of *S. impletus* Gordon, holotype of *S. martini* Gordon, holotype and 2 paratypes of *S. mimoides* Gordon, holotype of *S. neomexicanus* Gordon, 2 paratypes of *S. nuttingi* Gordon, holotype of *S. simulans* Gordon, 3 paratypes of *S. tenebricus* Gordon, 78 paratypes of *S. utahensis* Gordon, and 1 paratype of *S. wickhami* Gordon), as well as 34 identified and unidentified *Scymnus*. In February 1976, 88 determined European Mordellidae (ex Leng collection) were also donated.

Throughout his life, Bill Nutting had a great love of nature and the outdoors. He was proud to be a member of the Sierra Club, but he was disappointed when his membership was cancelled by that organization because of his work in the nuclear industry. Bill Nutting was a member of the Pacific Coast Entomological Society for 43 years, having been elected to membership at the 191st meeting, held on 4 Jan 1947. He was also a member of the Coleopterists Society, the Entomological Society of Washington, and the New York Entomological Society.

Bill Nutting's life was a fine example of how a person can contribute in an avocational way to the field of entomology, by not only adding to his own enjoyment, but by also making a lasting contribution to science.

Bill Nutting is survived by his wife, Priscilla (née King) Nutting; two sons, Willard H. Nutting, III, of San Francisco, California, and Richard D. Nutting of Colorado Springs, Colorado; his sister, Jean Thallon, of Nevada City, California; and three grandchildren, Phillip and Judith Nutting of Kensington, California, and Nathan Nutting of Colorado Springs.

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